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HOFFMAN WARNICK LLC
75 STATE STREET
14TH FLOOR
ALBANY, NY 12207

EXAMINER

MERANT, GUERRIER

ART UNIT	PAPER NUMBER
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2117

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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PTOCommunications@hoffmanwarnick.com

DETAILED ACTION

Final Action

Response to Amendment

1. Applicant's arguments/amendment, filed 06/19/08, have been fully considered but they are not persuasive.

Response to Arguments

2. As per the 35 U.S.C. 101 rejections:

In view of the paragraph [0022] stating "it is understood that the systems...can be implemented in hardware, software, or a combination of hardware and software." The Applicant argued that the specification does not limit the claimed system to software per se. The Examiner respectfully disagrees because the claimed elements (e.g. defect table, fault isolation) of the system are not clear enough to be considered as physical part of a device.

3. As per the rejections of claims 1-20: The Applicant argued that the prior arts of record fail to teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features. The Examiner respectfully disagrees. **Shimono (US 6,308,293 B1)** teaches a fault diagnosis comprising teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features (e.g. col. 1, lines 38-65). Therefore, the prior arts of record implicitly teach the limitations argued by the Applicant.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 1, the specification (see [0022]) describes the system as software per se, which is a non-statutory subject matter.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morioka et al. (US 6,611,728)** in view of **Shimono (US 6,308,293 B1)**.

Claims 1, 9, 10, 15 and 18-20: **Morioka et al** substantially teaches a defect table (e.g. item 111, fig. 1) that associates previously studied features with known failures (e.g. col. 8, lines 36-62); and a fault isolation system that compares faulty device features with the previously studied features listed in the defect table in order to identify causes of the fail (e.g. col. 9, lines 9-30 & col. 11, lines 17-34). But **Morioka et al** fails to explicitly teach inputting suspected faulty device features and comparing suspected

faulty device features with previously studied features. However, **Shimono** teaches a fault diagnosis comprising teach inputting suspected faulty device features and comparing suspected faulty device features with previously studied features (e.g. col. 12, lines 38-65). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the teaching presented in the prior arts with the one taught by **Shimono** in order to locate and identify faults.

7. Claims 2-4, 6, 8, 11-13 and 17: **Morioka et al** and **Shimono** teach a diagnosis system as in claims 1, 9, and 15 above, wherein the previously studied features are selected from the group consisting of: net names, instance names, cell names, physical attributes, logical attributes, presence of a feature, and absence of a feature (col.20, lines 45-67 & col. 11, lines 14-34; **Morioka et al.**).

8. Claim 5: **Morioka et al** and **Shimono** teach a diagnosis system as in claim 1 above, wherein the simulation program utilizes device logic and operational logs to identify faulty device features (e.g. col. 14, lines 20-31- **Shimono**).

9. Claims 7, 14, and 16: **Morioka et al** and **Shimono** teach a diagnosis system as in claims 1, 9, and 15 above, further comprising a table update system for maintaining and updating the defect table (col. 23, lines 15-26, Fig. 30; **Morioka et al.**).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Merant Guerrier whose telephone number is (571) 270-1066. The examiner can normally be reached Monday through Thursday from 10:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques, can be reached on (571) 272-6962. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2066.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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Guerrier Merant
10/10/08

/JACQUES H LOUIS-JACQUES/
Supervisory Patent Examiner, Art Unit 2100